



ICAO

*International Civil Aviation Organization***WORKING PAPER****ASIA AND PACIFIC (APAC)****Twenty-first Meeting of the Meteorological Information Exchange Working Group (MET/IE WG/21)**

Bangkok, Thailand, 27 to 29 March 2023

Agenda Item 2: Review of follow-up from previous meetings**FOLLOW-UP ACTION FROM MET/IE WG/20**

(Presented by the Secretariat)

SUMMARY

This paper presents the status of follow-up action on outcomes from the previous meeting of the Meteorological Information Exchange Working Group (MET/IE WG/20) and invites the meeting to propose and endorse updates, as necessary, to the status of follow-up action recorded in the MET/IE WG List of Actions.

1. INTRODUCTION

1.1 Outcomes from the Twentieth Meeting of the Meteorological Information Exchange Working Group (MET/IE WG/20; online, 28 to 30 March 2022), including the conjoint session with the Twelfth Meeting of the Meteorological Services Working Group (MET/S WG/12), included eighteen (18) new action items, including four (4) from the conjoint session, for the MET/IE WG List of Actions.

1.2 The meeting will review the status of follow-up action on the outcomes from MET/IE WG/20, formulate additional follow-up actions as necessary, and propose and endorse updates to the MET/IE WG List of Actions.

2. DISCUSSION

2.1 The action items recorded in the Report of MET/IE WG/20, along with unresolved action items from previous meetings of the MET/IE WG, are detailed in the MET/IE WG List of Actions at the **Appendix A** to this paper.

2.2 The List of Actions indicates the status of follow-up on the action items (in the last column). Updates to the status of follow-up on the action items since the last meeting are indicated by highlighted and strike-through text. *Note: action items which the MET/IE WG previously agreed are completed, superseded (by other activities), closed or redundant, are removed from the list.*

3. ACTION BY THE MEETING

3.1 This paper invites the meeting to:

- a) Review the MET/IE WG List of Actions, including the status of follow-up on the action items (as indicated at the **Appendix A** to this paper);
- b) Propose further updates, as necessary, to the status of follow-up on action items in the MET/IE WG List of Actions; and
- c) Endorse the proposed updates to the status of follow-up on action items in the MET/IE WG List of Actions.

APPENDIX A**MET/IE WG – LIST OF ACTIONS**(Note: Proposed updates are indicated with ~~strike through~~ and **highlighted** text)**New action items recorded by MET/IE WG/20**

ACTION ITEM	DESCRIPTION	BY DATE	RESPONSIBILITY	STATUS/REMARKS
MET/IE WG/20 01	Follow up with Australia on opportunities to combine the ICAO APAC 2022 Webinar on Space Weather and Australia and New Zealand's 2022 Space Weather Exercise. <i>[Ref: Report of MET/IE WG/20, para. 2.10.]</i>	Before MET SG/26	Secretariat, in coordination with participants from Australia	IN PROGRESS
MET/IE WG/20 02	Coordinate the consequential amendments to the ANP (Volume II, Table MET II-2 – Aerodrome Meteorological Offices) and the ROBEX Handbook to reflect the requirements for MET service at QUANG NINH/Van Don International Airport (ICAO location indicator VVVD). <i>[Ref: Report of MET/IE WG/20, para. 3.5.]</i>	Before MET SG/26	Secretariat, in coordination with participants from Vietnam	IN PROGRESS
MET/IE WG/20 03	Provide contact details for IROG Jeddah (Saudi Arabia) and IROG Johannesburg (South Africa) to the members from Thailand to discuss their support for IWXXM and AMHS/FTBP and the timing for the testing and implementation of the inter-regional IWXXM exchange. <i>[Ref: Report of MET/IE WG/20, para. 4.15.]</i>	Before MET SG/26	Secretariat, in coordination with participants from Thailand	IN PROGRESS
MET/IE WG/20 04	Develop updates to the document <i>IWXXM implementation in APAC Region – FAQs</i> based on lessons learnt from monitoring IWXXM validation conducted by ROC Hong Kong. <i>[Ref: Report of MET/IE WG/20, para. 4.31.]</i>	Before MET SG/26	Members from Hong Kong, China, assisted by members from New Zealand	IN PROGRESS
MET/IE WG/20 05	Invite interested WG members to form an ad hoc group to review the Performance Indices (PIs) used in APAC OPMET monitoring. <i>[Ref: Report of MET/IE WG/20, para. 5.13.]</i>	Before MET/IE WG/21	Secretariat and Chair MET/IE WG and designated ad hoc group, including Members from Thailand and TBD	IN PROGRESS
MET/IE WG/20 06	Use as the benchmark for OPMET monitoring the latest available ROBEX data provided by the Secretariat (rather than by the published ROBEX Handbook). <i>[Ref: Report of MET/IE WG/20, para. 5.15.]</i>	Before MET/IE WG/21	Thailand, in coordination with the Secretariat	IN PROGRESS
MET/IE WG/20 07	Update the ROBEX Handbook, Appendix I, to reflect changes in the focal point information for Thailand and Malaysia. <i>[Ref: Report of MET/IE WG/20, para. 6.2.]</i>	Before MET SG/26	Secretariat, in coordination with participants from Thailand and Malaysia	IN PROGRESS
MET/IE WG/20 08	Delete the list of area designators in the ROBEX Handbook, Appendix D, 2.1.2. c), which replicates WMO No. 386, Table C1, Part II – Area Designators and, therefore, is unnecessary in the ROBEX Handbook. <i>[Ref: Report of MET/IE WG/20, para. 6.3.]</i>	Next ROBEX Handbook update	Secretariat	IN PROGRESS
MET/IE WG/20 09	Develop updates to the ROBEX Handbook, Appendix E – <i>Procedure and Format of METNO bulletin for APAC ROBEX Bulletins</i> to clarify the procedures concerning the general area designator in the METNO Header (in paragraph 2.2.) and the responsibilities for issuing METNO messages. <i>[Ref: Report of MET/IE WG/20, para. 6.4.]</i>	Before MET SG/26	Secretariat and ROBEX Focal Points from Australia, Hong Kong, China, Japan and Singapore	IN PROGRESS
MET/IE WG/20 10	Coordinate with Indonesia to: a) Validate the proposed updates in WP/08, which concerned aerodrome names that were not reflected in the ANP, Table AOP I-1 – <i>International Aerodromes Required in the APAC Regions</i> ; and b) Include the validated proposals in the next update of the ROBEX Handbook. <i>[Ref: Report of MET/IE WG/20, para. 6.9.]</i>	Next ROBEX Handbook update	Secretariat, in coordination with participants from Indonesia	IN PROGRESS

ACTION ITEM	DESCRIPTION	BY DATE	RESPONSIBILITY	STATUS/REMARKS
MET/IE WG/20 11	Coordinate with Mongolia to: a) Notify the regional focal point and team for management of the METNO process of the changes in IP/11; and b) Include the proposals in IP/11 in the next update of the ROBEX Handbook. <i>[Ref: Report of MET/IE WG/20, para. 6.14.]</i>	Next ROBEX Handbook update	Secretariat, in coordination with participants from Mongolia	IN PROGRESS
MET/IE WG/20 12	Document the steps States should take to: a) Effect changes to the ROBEX scheme; and b) Notify States of changes to MET service. <i>[Ref: Report of MET/IE WG/20, para. 6.15.]</i>	Before MET SG/26	Secretariat	IN PROGRESS
MET/IE WG/20 13	Convene a quarterly meeting of the MET/IE WG (core) members to progress updates to the work plan and terms of reference, including assigning specific dates and responsibilities (incl. identifying a lead and supporting resources for activities) and merging Activities 1 and 2 in the work plan. After the Secretariat and Chairs of MET SG and WGs have prepared the integrated reporting template. <i>[Ref: Report of MET/IE WG/20, para. 7.5.]</i>	Before MET SG/26	Chair MET/IE WG and Secretariat	IN PROGRESS
MET/IE WG/20 14	Coordinate a proposal to supplement the VAAC Backup Test Procedures in the Appendices of the APAC Regional SIGMET Guide with information on the backup arrangement with VAACs Washington and Montreal. <i>[Ref: Report of Conjoint Session of MET/IE WG/20 and MET/S WG/12, para. 1.4.]</i>	Before MET/IE WG/21	Members from VAAC Darwin	IN PROGRESS
MET/IE WG/20 15	Concerning the inclusion of MWOs not located in the APAC Region, perform a cross-check of the ICAO APAC SIGMET Test Procedures against the legacy FASID Tables MET 3A – Tropical Cyclone Advisory Centres and 3B – Volcanic Ash Advisory Centres. <i>[Ref: Report of Conjoint Session of MET/IE WG/20 and MET/S WG/12, para. 2.17.]</i>	Before MET SG/26	Secretariat	IN PROGRESS
MET/IE WG/20 16	Develop a proposal to update the SIGMET Test Procedures to include disseminating SIGMET and advisory messages in IWXXM form. <i>[Ref: Report of Conjoint Session of MET/IE WG/20 and MET/S WG/12, para. 2.18.]</i>	Before MET SG/26	MET/IE WG and MET/S WG designated ad hoc group	TO COMMENCE
MET/IE WG/20 17	Follow up with Myanmar on the appropriate addressing of letters from ICAO inviting participation in SIGMET tests. <i>[Ref: Report of Conjoint Session of MET/IE WG/20 and MET/S WG/12, para. 2.23.]</i>	Before MET SG/26	Secretariat, in coordination with participants from Myanmar	IN PROGRESS
MET/IE WG/20 18	Submit a paper to MET SG requesting States to provide up to date contact information for letters from ICAO requesting the States to participate in SIGMET tests. <i>[Ref: Report of Conjoint Session of MET/IE WG/20 and MET/S WG/12, para. 2.24.]</i>	Before MET SG/26	Secretariat	TO COMMENCE

Unresolved action items recorded by MET/IE WG/19

ACTION ITEM	DESCRIPTION	BY DATE	RESPONSIBILITY	STATUS/REMARKS
01	Propose updates to the ROBEX Handbook: to ensure clarity of the guidance concerning the ROCs' responsibilities for the distribution of IWXXM formatted OPMET data [ref: para. 2.5.]	May 2021	WG	To commence
02	Propose updates to the ROBEX Handbook: to ensure the availability of the AFTN addresses for the designated APAC ROCs [ref: para. 2.6.]	May 2021	WG	To commence
05	Propose updates to the ROBEX Handbook: to include the necessary consequential changes to OPMET bulletins described in WP/08 (SAPS31 NFFN, SAPS32 NWWW, SAPS33 NTAA, SANG31 YBBN, FTSP31 NFFN, FTSP32 NWWW, FTSP33 NTAA, FTNG31 YBBN) and presented in Attachment A to WP/08 and to include information on the (KWBC) bulletins containing Pago Pago METAR and TAF [ref: para. 4.3.]	May 2021	Secretariat	PART COMPLETED ROBEX HB 14 th Ed.; updates pending concerning Pago Pago

ACTION ITEM	DESCRIPTION	BY DATE	RESPONSIBILITY	STATUS/REMARKS
11	Propose updates to the ROBEX Handbook: to include the OPMET exchange information for Van Don International Airport (VVVD), as advised by Viet Nam and presented in MET/IE WG/19, WP/15 – <i>A new international airport (VVVD) to join ROBEX network for international OPMET data exchange.</i> [ref: para. 6.11.]	May 2021	Viet Nam and Secretariat	IN PROGRESS MET/IE WG/20, IP/02

Unresolved action items recorded by the conjoint session of MET/IE WG/19 and MET/S WG/11

ACTION ITEM	DESCRIPTION	BY DATE	RESPONSIBILITY	STATUS/REMARKS
01	State letter request to user States to ensure the relevant operational units participate in the VAAC backup tests and provide the VAACs with their current, valid AFTN addresses for receipt of the VAA messages. [Ref: para. 1.1.-1.3., MET/IE WG/19 and MET/S WG/11 conjoint session]	Before next scheduled test	Australia, New Zealand, Secretariat	TO COMMENCE
02	Investigate possible improvements to the template for the SIGMET test summary table to enable a more detailed analysis of the SIGMET tests, including analysis of more than one WC and/or WV SIGMET test message issued by the same MWO (which receives TCA and/or VAA from more than one TCAC and/or VAAC). [Ref: para. 2.16., MET/IE WG/19 and MET/S WG/11 conjoint session]	Before next scheduled test	SIGMET test Focal Points, Secretariat	TO COMMENCE

Unresolved action items recorded by MET/IE WG/18 and MET/S WG/10

The following action items are applicable to one or both of the MET/IE WG and MET/S WG

ACTION ITEM	DESCRIPTION	BY DATE	RESPONSIBILITY	STATUS/REMARKS
Terms of Reference and Work Program				
01	Terms of Reference and Work Program – online coordination: Make use of regular online coordination meetings to facilitate progress on follow-up on the action items in the Task List/s [ref: para. 2.3. and 7.3.]	As necessary	Secretariat and WG Chairs and members	IN PROGRESS
OPMET Monitoring				
07	OPMET performance indices – States’ follow-up: Inform States concerned of the locations with low performance indices and advise the States to take appropriate corrective actions; address the above communication also the Regional OPMET Centres (ROCs) responsible for the collection of OPMET messages from the originating stations [ref: para. 3.4. and 3.5.]	Before MET SG/26	Secretariat	IN PROGRESS Ref: MET/IE WG, 5. Work Plan, Activity 1 and Activity 2
IWXXM implementation				
Regional Guidance Materials				
13	ROBEX Handbook updates – Update process: Propose options for a more streamlined process for updating the ROBEX Handbook data, such as through the development of a more dynamic, online repository for ROBEX data [ref: para. 4.4.]	Before MET SG/24	MET/IE WG	IN PROGRESS Ref: MET/IE WG, 5. Work Plan, Activity 6
14	ROBEX Handbook updates – IWXXM-related data: Investigate the development of an online repository for ROBEX data in which States would share and maintain up to date information on the IWXXM-capabilities of the ROBEX scheme and the AMHS addresses to support the required dissemination of IWXXM messages [ref: para. 4.6.]	Before MET SG/24	MET/IE WG	IN PROGRESS Ref: MET/IE WG, 5. Work Plan, Activity 6
15	ROBEX Handbook updates – IWXXM-related flexibility: Propose updates, as necessary, to reflect APAC States’ requirement for flexibility of the ROBEX scheme structure during the transition to Region-wide implementation of IWXXM exchange [ref: para. 4.7.]	Before MET SG/24	MET/IE WG	IN PROGRESS Ref: MET/IE WG, 5. Work Plan, Activity 6
18	ROBEX Handbook and SIGMET Guide updates – Legacy FASID information: Prepare the consequential updates of the required information from the legacy FASID Tables relating to meteorology, apart from Table MET 1A, Table MET 1B and Table MET 3C, and the existing ICAO APAC regional guidance documentation, according to the proposal in WP/11 and the Draft Decision [ref: para. 4.16.]	Before MET SG/24	Secretariat and States	IN PROGRESS Ref: MET/IE WG, 5. Work Plan, Activity 6

ACTION ITEM	DESCRIPTION	BY DATE	RESPONSIBILITY	STATUS/REMARKS
19	ANP and ROBEX Handbook updates – Vietnam NOC: Coordinate on the implementation of the Vietnam NOC, including development of proposed updates to the APAC ANP and ROBEX Handbook [ref: para. 3.7.]	As necessary	Vietnam and Thailand	IN PROGRESS Ref: MET/IE WG, 5. Work Plan, Activity 6
20	ANP and ROBEX Handbook updates – Indonesia new aerodromes: Determine any requirement (based on IP/09) to update the ICAO APAC ANP and/or ROBEX Handbook [ref: para. 8.27.]	Before MET SG/24	Secretariat and Indonesia	IN PROGRESS Ref: MET/IE WG, 5. Work Plan, Activity 6
SIGMET test				
28	SIGMET test results – corrective action plan: Investigate the reason for the reduced reception of SIGMET test messages at Regional OPMET Centre (ROC) London compared to APAC RODB's and share the results with MET/S for potential corrective action [ref: para. 6.12.]	Before MET SG/26	MET/IE WG	IN PROGRESS Ref: MET/IE WG, 5. Work Plan, Activity 3 AND Ref: MET/S WG, 5. Work Plan, Activity 3
Other				
30	VAAC backup test procedures – review and update: Refer to the pertinent information from IP/08 and determine appropriate action for the next review and update of the VAAC backup test procedures [ref: para. 8.25.]	Before MET SG/26	MET/IE WG and MET/S WG	IN PROGRESS Ref: MET/IE WG, 5. Work Plan, Activity 4

Unresolved action items recorded by MET/IE WG/17

ACTION ITEM	DESCRIPTION	BY DATE	RESPONSIBILITY	STATUS/REMARKS
17/1	Coordinate all necessary notifications concerning the planned handover of the provision of SIGMET service valid for Phnom Penh FIR from MWO Chengdu to MWO Phnom Penh, including the following: (a) changes to the routing of the SIGMET and advisory information at the responsible VAAC, TCAC and the RODBs; and (b) updates to the ANP, including the legacy FASID tables, and the Regional SIGMET Guide. <i>[Report of MET/IE WG/17, para. 3.1 – 3.4, refers]</i>	TBA	Cambodia and Secretariat	TO COMMENCE Action should be completed before handover of SIGMET service
17/3	Coordinate all necessary notifications concerning the planned provision by China of OPMET information for the new Beijing Daxing International Airport, from 15 August 2019, including the following: (a) updates to the ROBEX Handbook and notification to States via "METNO"; and (b) updates to the ICAO Doc. 7910 and APAC ANP, including AOP and MET tables. <i>[Report of MET/IE WG/17, para. 3.6 – 3.8, refers]</i>	17 Jun 2019	China and Secretariat	TO COMMENCE Action should be completed before commencement of new OPMET service
17/4	Coordinate a proposal to update the ROBEX Handbook to enable the regular exchange of several international OPMET bulletins to the ROBEX Centre Beijing and present it for further review and possible endorsement by MET/SG/23. <i>[Report of MET/IE WG/17, para. 3.9 – 3.12, refers]</i>	17 Jun 2019	Secretariat China	IN PROGRESS
17/10	Liaise with the SADIS Provider concerning obtaining OPMET availability statistics on SADIS for future meetings of the MET/IE WG. <i>[Report of MET/IE WG/17, para. 4.21, refers]</i>	Next meeting MET/IE WG	Secretariat	IN PROGRESS
17/11	Present a consolidated proposal for updates to the ROBEX Handbook, to reflect the establishment of an NOC (within the ROBEX scheme) in Vietnam, for further review and possible endorsement by MET/SG/23. <i>[Report of MET/IE WG/17, para. 5.9 – 5.10, refers]</i>	17 Jun 2019	Vietnam, Thailand and Secretariat	IN PROGRESS
17/12	Propose any necessary updates to the ROBEX Handbook to reflect the actual requirements for OPMET information. <i>[Report of MET/IE WG/17, para. 5.11 – 5.13, refers]</i>	17 Jun 2019	States with low PIs for OPMET	IN PROGRESS

ACTIO N ITEM	DESCRIPTION	BY DATE	RESPONSIBILTY	STATUS/ REMARKS
17/16	Coordinate the requirements for all additional, new updates to the ROBEX Handbook and consolidate these into an update proposal for further review and possible adoption by MET/SG/23. <i>[Report of MET/IE WG/17, para. 6.5, refers]</i>	17 Jun 2019	Secretariat	IN PROGRESS Related to action items: 17/3, 17/4, 17/11, 17/12 and 17/14
17/20	Propose updates to all required APAC documentation regarding the originating address of Australian WV SIGMETs (i.e., YMMC, rather than AMMC). <i>[Report of conjoint session of MET/IE WG/17 and MET/S WG/9, para. 2.24, refers]</i>	17 Jun 2019	Secretariat and Australia	IN PROGRESS ANP Table MET II-1 pending update

Unresolved action items recorded by MET/IE WG/16

ACTIO N ITEM	DESCRIPTION	BY DATE	RESPONSIBILTY	STATUS/ REMARKS
16/4	Review the usage of the request-reply service provided and, where appropriate, arrange for the routine provision of OPMET bulletins as an alternative to the usage of the request-reply service for routine access to the stored OPMET data [Report of MET/IE WG/16, para. 5.8, refers].	Mar 2019	APAC RODBs	IN PROGRESS

Unresolved action items recorded by ROBEX WG/13

ACTION ITEM	DESCRIPTION	BY DATE	RESPONSIBILITY	STATUS/ REMARKS
13/7	Investigate feasibility of including provisions in the regional guidance material related to the issuance of routine TAF at intervals of three (3) hours; present draft material to MET SG/21 [Ref: ROBEX WG/13 Decision 13/7].	June 2017	Secretariat and ROBEX WG	IN PROGRESS Coordinate necessary follow-up through the ICAO ANP working group [Ref: MET/IE WG/16 Report para. 2.9].
